found in which one kidney was absent; and none, out of 1200 cases, at Middlesex Hospital; so that that was a chance that might fairly be disregarded. There was a case, it was true, in which a woman with only a single kidney had had that kidney excised, but she was a case of great deformity, having no vagina and no uterus, and the abnormalities of the genital organs were just those which experience has shown were associated with renal malformations. The loin formed a very convenient region for a drain, and he was strongly in favor of draining fluid tumors there; regarding a man from whom 10 ounces of urine were drained in the loin as in a better position than a man with only one kidney.—*British Medical Journ.*, Nov. 29, 1884.

Nephrectomy for Calculous Pyelitis.

Dr. E. SONNENBURG reports (*Berlin. Klin. Wochensch.*, Nov. 24) the case of a woman, æt. 52 years, who had suffered from pain in the right loin since last Easter, accompanied by fever, wasting, and polyuria. She came under Dr. Sonnenburg's care in August, when the presence of a large fluctuating tumor in the right half of the abdomen was ascertained, and on aspiration pus was drawn off from it. Nephrectomy by the abdominal incision was performed on August 25th. The operation was difficult and tedious, the thin wall of the cyst rupturing in the removal. The whole pedicle was secured to the wound, but it was found impossible to suture the peritoneum. The organ was converted into a chambered, pus-containing sac, with numerous thin-walled outlying cysts, and a large branching calculus was lodged in the dilated pelvis. Hardly any renal tissue remained. Great collapse followed, terminating in death on the second day, and during the whole interval no urine at all was secreted. There was no peritonitis; the left kidney weighed 190 grammes, and was anæmic, but histologically almost normal, except for some localized fatty degeneration of the renal cells and slight increase in places of the interstitial tissue. The fatal issue of the case could not, Dr. Sonnenburg thinks, be attributed to the shock of the operation and the collapse alone; but that the condition of anuria, the cause of which remains unexplained, was in the main answerable for this result.—*Lancet*, Nov. 29, 1884.

Contusions and Ruptures of the Intestine without Lesion of the Abdominal Wall.

M. CHAVASSE, of the French Army, reports two cases of injury of this nature, and has found 149 cases in literature.

The first case which he reports was that of a man who was kicked on the abdomen by a horse. The autopsy showed multiple intestinal lesions, and complete rupture of a loop of the small intestine. The second case was due to the same cause; but the patient recovered, as the injuries were mild. In the army, in times of peace, contusions and ruptures of the intestines are almost always caused by kicks from horses. In the report of the Surgeon-General of the Prussian Army for 1879–81, Beck reports 17 cases due to this cause. Of the 149 cases collected by Chavasse, this cause was present in 36 cases, exclusive of those reported by Beck; 23 cases were caused by the passing of a carriage or wagon wheel over the abdomen; 13 were caused by kicks from men.

The anatomical lesions found at the autopsy, in the case first reported, are of considerable interest. Three different sections of the intestines, superimposed from before backwards, were injured; the transverse colon and the duodenum were contused; and a loop of the small intestine, situated between them at the ileo-jejunal junction, was completely cut in two. The prevertebral tissues were infiltrated with blood, and showed traces of contusion. It was the least resistant loop of intestine which, in spite of its position between the others, was most severely injured. These multiple lesions are not rare, and it is important to remember that they are more frequently produced by kicks from horses. In 23 cases the small intestine was injured 16 times, and the small and large intestine 7 times. In the 149 cases collected the mesentery was torn in 11. Bouley reports a case in which the rupture of the intestine was $1\frac{2}{10}$ inch long, and Lentz one in which it was $4\frac{2}{5}$ inches long; 14 cases of complete isolation are reported; of the duodenum 1; junction of the duodenum and jejunum 3; ileo-jejunal 10. Complete section of the large intestine has not been observed, very probably by reason of its anatomical nature, its size, and its ordinary state of distension by gas. As regards the frequency with which different portions of the small intestine are injured, Chavasse classes them as follows: 1. Small intestine—middle, superior, and inferior thirds; 2. Colon; 3. Duodenum; 4. Cæcum; 5. Sigmoid flexure. On account of its length the ileo-jejunal portion is injured six times as often as the other portions It is curious to note that two cases of abdominal injury have been reported in which the lesions were limited to the peritoneum.

The question of the mechanism of ruptures of the intestine by these injuries has been variously interpreted by authors. Jobert, Forget, Baudens, and Legouest recognize no other method than that of compressing the intestine between the vertebral column and the impacting body. Longuet has shown experimentally that this explanation is perfectly justifiable. Parsavant reports a case in which three irregular perforations were made in the transverse colon by a blow from a large stone. In his work on internal pathology, Duplay gives three methods by which rupture may be produced: 1. Direct compression against the vertebral column; 2. Forcing of the intestinal contents from within outwards; 3. Compression of the intestinal wall between the injuring body and the matters contained in the cavity of the viscus. Of these the former is most probably the true explanation.

As would be expected, the principal symptoms are due to peritoneal reflex; sharp localized pain, repeated vomiting and purging; regularly progressive shock, and tendency to collapse; the face is pale; the extremities are cold; the temperature febrile, and oscillating about the normal, contrasting with the small, rapid pulse, and anxious and accelerated respiration. Peritonitis may or may not be developed early. It is necessary, in making a diagnosis, to eliminate lesions of other abdominal organs. If the liver is injured there will be a sensation of weight in the right hypochondrium; the pain, which is generally localized in this region, often radiates around the body, towards the xyphoid cartilage, or to the shoulder. If the gall-bladder is injured or ruptured, it will be shown by the presence of bile in the vomited matters. Lesions of the stomach will be shown by blood in the vomited matters from the beginning. The presence of blood in the urine and the amount of urine in the bladder will usually enable the surgeon to know if the kidneys or bladder are injured. Tchudnovski gives as a sign of intestinal rupture an amphoric souffle in the right hypochondrium, the lung being uninjured. This symptom is not more valuable than the following, given by Spaggia. In auscultating the lateral abdominal and lumbar wall, one hears, in cases of rupture, a gurgling bruit caused by the inspiratory and expiratory movements, displacing the fecal and gaseous matters in the abdominal cavity. The presence of blood in the stools is a positive indication of a serious lesion; but it is rarely seen (four times in 147 cases), as marked constipation is almost always present. The existence of hernia at the time of the injury may cause a serious error in diagnosis.

The prognosis in a case of this kind should be very reserved. The mortality in the 149 collected cases was 96 per cent., death having occurred most frequently between the twelve and twenty-four hours. On account of the high rate of mortality of ruptures treated by the ordinary means, the surgeon should not hesitate to perform laparotomy, and search for the injury. Whether a simple suture be placed in the intestinal wall, or the intestine be resected, or an artificial anus be made, must depend upon the extent of the injury and the judgment of the surgeon.—*Archives de Méd. et de Pharm. Milit.*, Nos. 13, 14, 15, 1884.

Excision of a Piece of Intestine.

Dr. JOSEPH GRINDON, of St. Louis, reports the case of a woman who received a stab-wound in the left groin, parallel to Poupart's ligament and about an inch above it. Through this opening there had protruded a mass of small intestine, mesentery, and omentum. There had passed out probably between six and eight feet of intestine. In one of the foremost loops were to be seen three cuts or tears, all communicating with the lumen of the gut, and close to the mesenteric junction. Two were on one side not quite two inches apart, and one on the other, as it were behind and between the first two. It seemed as though all three had been done at one thrust, the instrument passing in at one side, nicking the opposite wall, and passing out again on the same side of the bowel as it penetrated. The largest of these openings easily admitted the finger, the other two being much smaller, but through all there oozed blood and fluid feces. The condition of things here met with agreed with the observations of Dr. Parkes, of Chicago, in his recent experiments on dogs. He says, "Extravasation of the contents of the tube occurred in every case where the tube was wounded;" and again, "any perforation of the bowel, even a needle perforation, means extravasation." These cuts were not clean incisions, but contused, lacerated wounds, presenting the appearance of having been inflicted with a dull weapon.

It was at first proposed to throw ligatures about the wounds. The number and extent of the latter, however, would have made this manœuvre result in too great a narrowing of the lumen; on the other hand, the ragged character of the wounds, and the contused and ecchymosed appearance of the surrounding tissue did not encourage us in essaying to stitch the edges together. We therefore proceeded to remove a section of the gut about two inches in length comprising the entire circumference and including all the injured portion. In trimming off along the mesenteric border, a number of vessels were necessarily cut and tied. There was considerable eversion of the mucous membrane at each severed end; this was trimmed off with the scissors, and the gut brought together. Twelve or fifteen sutures of ordinary surgeon's silk were used; the needle being each time carried through all the coats in each direction. An interrupted stitch was put in at the mesenteric border, one directly opposite, and one half-way down on each side; between these was run a glover's suture. The free mesenteric edge was merely doubled over and left so.

The intestines were now well sponged off with clean water, no antiseptics ot any kind being used, and returned to the cavity of the abdomen. The omentum slipped back without much trouble, but reducing the intestine, distended with gas from the removal of accustomed pressure and relaxation of the muscular tunic, proved to be no easy task. As one loop would be forced in, another would slip out. By slightly enlarging the opening, however, and making continuous and equable pressure with the extended hand while the patient was brought partially under the influence of chloroform, and the thighs flexed, the reduction was finally accomplished, the last loops being livid, intensely congested, and of most forbidding appearance. The external wound was closed with a stout piece of silk passed through the entire thickness of the abdominal wall, a compress applied,